

HELIX (EURYCRATERA) IBARAOENSIS, n. sp. (Plate LVII. figs. 3, 4.)

Shell imperforate, globosely ovate, moderately solid, shining, transversely irregularly rugosely striated in front and very finely granulated on the upper whorls, the granules descending to the base behind, yellowish olive, encircled with numerous narrow dark brown bands that lose themselves and become darker towards the aperture and base; spire flatly convex, apex depressed; whorls $3\frac{1}{2}$, rapidly increasing, the last very large and inflated; aperture oblique, large, roundly ovate, pearly bluish violet within; peristome slightly thickened, the margins united by a thick callus; columella smooth.

Diam. maj. 3 poll. 6 lin., min. 2 poll. 8 lin., alt. 2 poll. 4 lin.

Hab. S.E. Betsileo, Madagascar.

This fine shell somewhat approaches *H. magnifica*, Fér., but is much more globular and compact, with the position of the spire less remote; and it has also a different style of coloration.

Examples of this and the preceding species have lately been received from S.E. Betsileo, Madagascar, by Mr. Edward Bartlett, of Maidstone, who has kindly placed them in my hands for description.

EXPLANATION OF PLATE LVII.

Figs. 1, 2. *Helix (Eurycratera) betsileoensis*, p. 728.
3, 4. — (—) *ibaraensis*, p. 729.

4. On Arachnida from the Mascarene Islands and Madagascar.

By ARTHUR G. BUTLER, F.L.S. &c., Assistant Keeper,
Zoological Department, British Museum.

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(Plate LVIII.)

Last year a small series of Spiders was obtained through Mr. H. H. Slater from Réunion and Mauritius, of which the following is a list.

1. SCYTODES MAJOR, Simon.
Plaine des Palmistes, Réunion.
2. ULOBORUS BORBONICUS, Vinson.
Mauritius.
3. OLIOS LEUCOSIUS, Walckenaer.
Mauritius.

The identification of these three species, however, is a little doubtful, owing to the imperfection of the figures in Vinson's 'Araneïdes des îles de la Réunion' &c.

4. *PHOLCUS BORBONICUS*, Vinson.

Plaine des Palmistes.

Although the specimen is somewhat injured, there is no mistaking this remarkable species.

5. *META*? *SANCTI-BENEDICTI*, Vinson.

There is also a Spider (somewhat damaged) which seems allied to the above, from Mauritius.

6. *NEPHILA LABILLARDIERI*, Thorell?

Plaine des Palmistes.

Although it seems scarcely possible that the species of Réunion can be identical with that from New Caledonia, I have failed to discover any difference by which to distinguish it from Dr. Thorell's figures.

7. *EPEIRA ISABELLA*, Vinson.

Plaine des Palmistes.

8. *EPEIRA SLATERI*, n. sp. (Plate LVIII. figs. 1, 1*a*, 1*b*.)

♀. Ferruginous; sides of the cephalothorax blackish; a central irregular longitudinal abdominal band represented by yellow spots and by four blackish depressed spots in the form of a square; falces piceous; labium and maxillæ, pectoral shield, and ventral surface of abdomen testaceous.

Cephalothorax subquadrate in front, almost circular behind the caput, with slightly concave posterior margin, the sutural margins of the caput well defined and terminating in a depression at the second third of the dorsal surface; a central Y-shaped line upon the posterior half of the caput and ending in the same depression; caput hairy, convex; central oculiferous tubercle prominent and X-shaped, the anterior pair of eyes rather further apart than the posterior pair; lateral eyes small, and placed upon little, oblique, less prominent tubercles at the anterior angle on each side; abdomen short, almost cordiform; epigyne linguiform; pectoral shield ovoid, truncated in front; coxæ short, widening towards the culmen; relative length of legs 1, 2, 4, 3. Falces quadridentate on lower margins. Length of cephalothorax and abdomen together 10 millimetres.

Plaine des Palmistes, Réunion.

There is a series of what I take to be a *Holothyru*s near *H. coccinelloides*, but differing from Walckenaer's figures in the number of joints in the antennæ and the absence of the linguiform plate on the under surface of the body.

The following Spiders have been received this year from Madagascar:—

1. *DRASSUS MALAGASSICUS*, n. sp. (Plate LVIII. figs. 3, 3*a*, 3*b*.)

♂. Mahogany-red; the cephalothorax with a broad ill-defined blackish longitudinal band on each side; the caput and a stripe on

each side beyond the blackish bands clothed with depressed whitish pile; palpi, excepting the bulbus and under surface of body, horn-yellow; bulbus castaneous, clothed with pale brown hair above, black below; falces castaneous, clothed with pale hair; legs sparsely clothed with pale hair and with black spines; abdomen above brown, densely clothed with short pale greyish-brown hair.

Cephalothorax ovoid, truncated in front, very slightly indented in the middle behind, shelving at the sides, but flattened along the dorsal or central longitudinal region; sutural outline of the caput feebly indicated; margins of cephalothorax behind the caput regularly convex; abdomen oval, flattened or truncated in front, posterior extremity obtusely pointed; pectoral shield oval and indistinctly nine-sided; coxæ barrel-shaped, those of the two anterior pairs of legs with straight anterior and convex posterior margins. Relative length of the legs 1 and 4, 2, 3; relative length of joints as follows:—femoral joints—first pair $8\frac{1}{2}$ millimetres, second pair 7, third 6, fourth 8; tibial (including basitibial or knee-joint)—first pair 11, second 9, third 7, fourth 11; tarsal joints or tarsus—first $13\frac{1}{2}$, second $11\frac{1}{2}$, third 9, fourth 14. Falces large, with three conical denticles on the inferior margins, and with a powerful curved movable fang; palpi about 9 millimetres in length, with the bulbus large, pyriform, and incurved. Length of cephalothorax and abdomen together (exclusive of falces) 17 millimetres.

Antananarivo (*Kingdon*).

2. GASTERACANTHA BORBONICA, Vinson.

Antananarivo (*Kingdon*).

3. GASTERACANTHA ACROSOMOIDES, Cambridge.

Antananarivo (*Kingdon*).

4. CÆROSTRIS TUBERCULOSA, Vinson.

Fianarantsoa (*Shuw*).

Unfortunately these specimens were allowed by the collector to get nearly dry and were injured by mould.

5. CÆROSTRIS MITRALIS, Vinson.

Antananarivo (*Kingdon*).

One specimen, agreeing well with the figures.

6. CÆROSTRIS STYGIANA, n. sp. (Plate LVIII. figs. 4, 4 a, 4 b.)

♀. Cephalothorax black, covered when dry with golden pile, posterior portion castaneous; legs above black, banded at base of tibiæ and tarsi with white; coxæ and femora below castaneous; falces black, fringed above with golden hair; maxillæ orange above, dark castaneous, fringed with dull lake-red hair, below; labium and pectoral shield blackish; abdomen above testaceous, below black.

Cephalothorax nearly square, but convex at the sides, almost perpendicular behind the caput; the latter more than twice as wide as long, with six projecting horizontal processes or prominent tubercles,

two on each side and two behind, the anterior lateral processes bifid, owing to their confluence with the lateral oculiferous tubercles; a prominent, nearly circular, central oculiferous tubercle bearing the four central eyes; the anterior pair of eyes larger than the posterior pair, nearer together, but separated from each other by a longer distance than from the posterior pair; abdomen scutiform, the anterior margin truncated; the anterior surface oblique, longitudinally sulcated and with a transverse series of six mammiform tubercles upon the ridges between the sulci; a large humeral process on each side, its length six millimetres, its form cylindrical, expanding laterally towards the culmen, which bears three well-developed and slightly incurved conical projections, the central projection forming the apex of the process and therefore considerably more prominent than the two lateral ones; a short distance behind each process is a small impression followed by a small conical process; lateral margins of the abdomen arched and indistinctly transversely sulcated, posterior extremity obtusely pointed; pectoral shield scutiform, truncated in front; coxæ short, rugose; relative length of legs 1, 2, 4, 3,; tibiæ and tarsi flattened and longitudinally sulcated; falces large, rugose, with four well-developed teeth on each internal margin and with a very powerful curved movable faug; palpi flattened, hairy, the two terminal joints expanded and longitudinally sulcated. Length of cephalothorax and abdomen together 17 millimetres.

Antananarivo (*Kingdon*); Fianarantsoa (*Shaw*).

I have compared three specimens of this singular species. It is allied to *C. paradoxa* of Java (Plate LVIII. figs. 5, 5 a, 5 b) and *C. avernalis*.

7. CÆROSTRIS AVERNALIS, Butler.

Fianarantsoa (*Shaw*).

I was pleased to find even an injured example of this species among Mr. Shaw's Spiders, as, although of little value as a specimen, it is in a sufficiently recognizable condition to prove the constancy of the specific characters.

8. EPEIRA LOCUPLES, n. sp. (Plate LVIII. figs. 2, 2 a, 2 b.)

♀. Cephalothorax black; caput clothed with whitish hair; legs castaneous, the tarsi orange-yellow, tarsal claws black; tibiæ and tarsi of third and fourth pairs of legs broadly banded with black; palpi castaneous; maxillæ and labium blackish, with whitish borders; pectoral shield yellowish, with black border; abdomen sordid whitish (probably bright chrome-yellow in life), two or three transverse lines across the anterior margin and six central impressed dots in pairs black; ventral surface black, with a triangular basal marking, a semi-circular patch on each side, and two transverse ellipsoidal spots a short distance in front of the spinnerets, sordid whitish (probably yellow in life).

Cephalothorax of the usual form, almost circular behind the caput, its posterior area deeply depressed and with two lateral diverging sulci

from the commencement of the depression on each side; caput covered sparsely with long depressed hair, directed forward and projecting beyond the anterior margin; a central shallow rounded depression; oculiferous tubercles prominent, the central one X-shaped, the anterior pair of eyes much larger and wider apart than the posterior pair; the lateral tubercles slightly oblique, the anterior eyes upon them being larger than the posterior; abdomen broad, oval, hairy in front; epigyne linguiform, with a well-defined marginal ridge; pectoral shield pentagonal; falces acutely quadridentate on each interior margin, the third denticle from the proximal extremity being largest, movable fang curved and tolerably powerful; palpi hairy; legs rather hairy, their relative length being 1, 2, 4, 3, the second and fourth pairs nearly equal. Length of cephalothorax and abdomen together 10 millimetres.

Antananarivo (*Kingdon*).

PYRESTHESIS, n. gen. (*Thomisidæ*)¹.

Apparently nearest to *Loxobates*, Thorell.

Length of cephalothorax rather greater than the width behind, and half as wide again as, the caput; dorsal surface to a little beyond the middle nearly flat, slightly sloping forwards, behind the middle abruptly sloping backwards; height just behind the middle equal to width at widest part; eyes occupying the whole anterior portion of the caput, oculiferous tubercles only indicated by little connecting ridges between the eyes; eyes arranged in two arched series, the anterior lateral eyes being the largest and the posterior lateral the smallest; central eyes forming a nearly perfect quadrangle; front margin of caput rounded, unarmed; external margin of falces with a smooth longitudinal ridge; legs very slightly compressed, nearly cylindrical, short, with a few scattered bristles but no distinct spines; abdomen globular, very slightly longer than broad, very slightly convex below.

Type *P. cambridgii*.

9. PYRESTHESIS CAMBRIDGII, n. sp. (Plate LVIII. figs. 6, 6a, 6b, 6c.)

♀. Cephalothorax black, tibiæ banded with yellow; coxæ olivaceous; abdomen above yellow, with scarlet border; the yellow area crossed by three transverse broad black bands, the first and second of which are connected in the centre by a short longitudinal band, and the second and third at their extremities; the first of these bands is arched, and the two others are slightly angulated and clavate at their extremities; a fourth very abbreviate and disconnected transverse band followed by a rounded black spot upon the posterior area; under surface dark olivaceous.

Cephalothorax smooth, with scattered hairs upon the caput, the central oculiferous tubercle indicated by a slight swelling of the sur-

¹ The Rev. O. P. Cambridge, to whom I sent a sketch of this Spider, writes that it "would seem to be near *Syurma*, Simon; but the thoracic region is apparently too much elevated for that genus."

face and by indications of connecting ridges between the eyes, posterior pair of eyes slightly wider apart than the anterior pair, of about equal size; lateral eyes placed obliquely, the anterior eyes fully twice the size of the central ones and four times as large as the posterior lateral ones; pectoral shield cordiform; falces smooth, with wavy external margins and hairy internal surfaces; maxillæ long, in-arched, smooth; abdomen rounded, slightly pointed behind, and almost flat below. Legs very short, their relative length 2, 1, 4, 3; the anterior pair as follows—femur 2 millimetres, tibia including knee-joint $2\frac{1}{2}$, tarsi 2; second pair—femur $2\frac{1}{3}$, tibia $2\frac{1}{3}$, tarsi 2; third pair—femur $1\frac{1}{2}$, tibia $1\frac{1}{2}$, tarsi $1\frac{1}{2}$; fourth pair—femur 2, tibia $1\frac{2}{3}$, tarsi $1\frac{1}{2}$; the legs entire therefore being—first pair $6\frac{1}{2}$ millimetres, second $6\frac{2}{3}$, third $4\frac{1}{2}$, fourth $5\frac{1}{8}$. Length of cephalothorax and abdomen together 8 millimetres, of abdomen alone $5\frac{1}{2}$.

Antananarivo (*Kingdon*).

EXPLANATION OF PLATE LVIII.

- Fig. 1. *Epeira slateri*, Butl., p. 730.
 1 a. ———, profile view.
 1 b. ———, falx.
 2. ——— *locuples*, Butl., p. 732.
 2 a. ———, profile view.
 2 b. ———, falx.
 3. *Drassus malagassicus*, Butl., p. 730.
 3 a. ———, profile view.
 3 b. ———, palpus.
 4. *Cærostris stygiana*, Butl., p. 731.
 4 a. ———, profile view.
 4 b. ———, view of abdomen from behind.
 5. ——— *paradoxa*, Dolesch, p. 732.
 5 a. ———, profile view.
 5 b. ———, view of abdomen from behind.
 6. *Pyresthesis cambridgii*, Butl., p. 733.
 6 a. ———, profile view.
 6 b. ———, caput with eyes.
 6 c. ———, falx.

5. Descriptions of Shells from Perak and the Nicobar Islands. By Lieut.-Col. H. H. GODWIN-AUSTEN, F.Z.S., and G. NEVILL, C.M.Z.S.

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(Plates LIX. & LX.)

The shells from Perak described in this paper were collected by Surgeon-Major E. Townsend, then with H.M. 3rd Regt. Buffs, on the expedition against the rebellious Malays in 1875-76. Some of the smallest were found in the caves of Buket Punong or Pondong, an isolated conical limestone hill about 1000 feet high. The collection brought to Calcutta was a very extensive and most interesting one, proving the richness of the land-molluscan fauna of that portion of the Malay peninsula, and how much more still remains to be